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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,645	10/07/2005	Mukesh Dalal	PD01	2733

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EXAMINER	
RIFKIN, BEN M	

ART UNIT	PAPER NUMBER
2129	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,645	DALAL ET AL.	
	Examiner	Art Unit	
	Ben M. Rifkin	2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The instant application having Application No. 10552645 has a total of 20 claims pending in the application, all of which are ready for examination by the examiner.

I. REJECTIONS NOT BASED ON PRIOR ART

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 4 and 14** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the second simulation that is being applied to the alternative path for analyzation. All of the figures shown in the document show only one simulation model, and nowhere in the specification does it discuss using a second simulation to analyze an alternative decision. For the sake of examination, this claim will be interpreted as having the simulation run for each possible path in the decision tree.

3. **Claims 6 and 16** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 16 recites the limitation "Wherein the Bayesian network comprises..." in Line 1 of each claim. There is insufficient antecedent basis for this

limitation in the claim. For the purposes of examination, it will be assumed that claims 6 and 16 are dependent upon claim 5 and 15 respectively.

II. REJECTIONS BASED ON PRIOR ART

Examiners Note: *Some rejections will be followed by an 'EN' that will denote an examiners note. This will be placed to further explain a rejection.*

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-20** are rejected under 35 U.S.C. 102(b) as being anticipated by Bauerle et al (US 4992942 A).

As per **claims 1 and 11**, Bauerle discloses "A method for optimizing an active decision-making process, comprising: a. creating a simulation model for the active decision making process" (C17, particularly L 58-64; *EN: This denotes simulating the decision tree, and computing outcomes*). "B. Generating a plurality of alternative decisions at a choice point in the active decision making process" (C7, particularly L39-64; *EN: This denotes selecting an option with the highest probability of achieving the desired result, which means there are multiple options to choose from).* "C. For one of these alternative decisions, generating a simulation of the future decision making process using the simulation model" (C17, particularly L58-64; *EN: This denotes using a*

simulation model to evaluate each path of the decision tree and compute the outcomes. This would include decisions made after the original decision in a standard tree fashion). "D. Analyzing the result of this simulation to select a decision for this choice point" (C17, particularly L58-64; *EN: This denotes using the simulation to evaluate each path of the decision tree and compute outcomes).*

As per **claim 2 and 12**, Bauerle discloses, "Wherein the simulation model comprises a stochastic component" (C3, particularly L 36-58).

As per **claim 3 and 13**, Bauerle discloses, "Wherein the stochastic component comprises a policy for choosing among alternative decisions" (C5, particularly L20-30; *EN; This denotes stochastic variables being involved in the decision making process for nutrients for a plant).*

As per **claim 4 and 14**, Bauerle discloses, "Wherein two simulations for an alternative decision are analyzed" (C17, particularly L58-64; *EN: This denotes running the simulation for each path in the decision tree, and using those analyzations to determine the best choice).*

As per **claim 5 and 15**, Bauerle discloses, "Wherein the Simulation model comprises of a Bayesian network" (C1, particularly L 56-66; *EN: This shows that the work is based off the logic of Bayesian view of probability, which would inherently include a Bayesian network).*

As per **claim 6 and 16**, Bauerle discloses, "Wherein the Bayesian network comprises hierarchical variables, abstract data types, differentials, user-defined functions, or POMDFPs." (C1, particularly L67-68; C2, particularly L1-12; *EN: This*

denotes using computer science and computer programming to create the engines that deal with probabilities, outcomes, and utilities of these decision trees. The use of the above functions is well known within the art of computer science).

As per **claim 7 and 17**, Bauerle discloses, "Further integrating the active decision making process with an external application" (C7, particularly 15-64; *EN: This denotes the up to date information being placed in memory for use by the decision making system to find optimal decisions for the plants nutrients).*

As per **claim 8 and 18**, Bauerle discloses, "Wherein the external application comprises a simulation system" (C7, particularly L15-39; C17, particularly L58-64; *EN: This denotes, first, the external application that takes in real world information to help the decisions. The second portion denotes the use of a simulation system to simulate the possible decisions and choose the best one).*

As per **claim 9 and 19**, Bauerle discloses, "Wherein the simulation model is updated using the data obtained by monitoring the external application" (C5, particularly L50-68; C6; C7, particularly L1-64; *EN: this denotes using a series of sensors and other observational tools to provide information to the simulation system in order to make adequate decisions*).

As per **claim 10 and 20**, Bauerle discloses, "Wherein the simulation model is updated using the results of the simulation" (C7, particularly L1-64; *EN: This denotes the simulation system deciding the amount of nutrients and the like placed on the plants. The feedback system determines which nutrients are being taken up, and then adjusts the next decision based on the simulations decision in the previous time period).*

Conclusion

The examiner requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

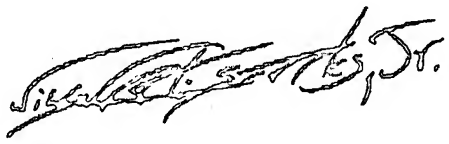
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben M. Rifkin whose telephone number is (571) 272-9768. The examiner can normally be reached on Monday through Friday 9:00 AM-6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 31, 2007

Ben Rifkin
Examiner
Art Unit 2129



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